# This Page Is Inserted by IFW Operations and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

### IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

### PATENT COOPERATION TREATY

	From ti	rom the INTERNATIONAL BUREAU			
PCT	To:				
NOTIFICATION OF THE RECORDING OF A CHANGE  (PCT Rule 92bis.1 and Administrative Instructions, Section 422)  Date of mailing (day/month/year) 12 February 2001 (12.02.01)	COLLARD, Christine J. Borden Ladner Gervais LLP Suite 1000, 60 Queen Street Ottawa, Ontario, K1P 5Y7 CANADA				
Applicant's or agent's file reference PAT 359W-90		IMPORTANT NOTI	FICATION		
International application No. PCT/CA00/00540	1	nal filing date (day/month/ye May 2000 (10.05.00)	ear)		
The following indications appeared on record concerning:      The applicant the inventor	the ager	the commo	on representative		
Name and Address NORZYME, INC. 1839 Logan Avenue		State of Nationality CA	State of Residence CA		
Winnipeg, Manitoba R2r 0h4 Canada		Telephone No. 204-633-9309			
		Facsimile No. 204-269-1190			
		Teleprinter No.			
The International Bureau hereby notifies the applicant that t     The person the name the add	Г	change has been recorded of the nationality	the residence		
Name and Address		State of Nationality	State of Residence		
THE UNIVERSITY OF MANITOBA Industry Liason Office		CA Telephone No.	CA		
631 Drake Centre Winnipeg, Manitoba, R3T 2N2		204-633-9309			
Canada		Facsimile No.			
		204-269-1190			
		Teleprinter No.			
3. Further observations, if necessary: The company identified in box 1 has assigned a box 2	ll its right:	to the company ident	ified in		
4. A copy of this notification has been sent to:					
X the receiving Office	ſ	the designated Offices	concerned		
the International Searching Authority	Ì	X the elected Offices cond	cerned		
X the International Preliminary Examining Authority		other:			
The latest the second Decrease of 18800	Authorized	officer			
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland		Catherine Ma	ıssetti		
Facsimile No.: (41-22) 740.14.35	Telephone	elephone No.: (41-22) 338.83.38			

### PATENT COOPERATION TREATY

	From the INTERNATIONAL BUREAU			
PCT	То:			
NOTIFICATION OF THE RECORDING OF A CHANGE  (PCT Rule 92bis.1 and Administrative Instructions, Section 422)  Date of mailing (day/month/year) 12 February 2001 (12.02.01)	COLLARD, Christine J. Borden Ladner Gervais LLP Suite 1000, 60 Queen Street Ottawa, Ontario, K1P 5Y7 CANADA			
Applicant's or agent's file reference PAT 359W-90	IMPORTANT NOTIFICATION			
International application No. PCT/CA00/00540	International filing date (day/month/year) 10 May 2000 (10.05.00)			
1. The following indications appeared on record concerning:  the applicant the inventor	the agent the common representative			
Name and Address ADE & COMPANY 1700-360 Main Street	State of Nationality State of Residence			
Winnipeg, Manitoba R3C 3Z3 Canada	Telephone No. 204-947-1429			
!	Facsimile No. 204-942-5723			
	Teleprinter No.			
2. The International Bureau hereby notifies the applicant that the	e following change has been recorded concerning:			
X the person X the name X the add				
Name and Address COLLARD, Christine J.	State of Nationality State of Residence			
Borden Ladner Gervais LLP Suite 1000, 60 Queen Street Ottawa, Ontario, K1P 5Y7	Telephone No. 613 237 5160			
Canada	Facsimile No. 613 787 3558			
	Teleprinter No.			
3. Further observations, if necessary:	· ·			
4. A copy of this notification has been sent to:				
X the receiving Office	the designated Offices concerned			
the International Searching Authority  X the International Preliminary Examining Authority	X the elected Offices concerned other:			
	Authorized officer			
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Catherine Massetti			
Consimile No : (41 22) 740 14 25	Telephone No. (41 22) 220 92 29			

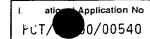
Form PCT/IB/306 (March 1994)

### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference		of Transmittal of International Search Report
84596-103	ACTION (Form PCT/ISA/)	220) as well as, where applicable, item 5 below.
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
PCT/CA 00/00540	10/05/2000	10/05/1999
Applicant		
THE UNIVERSITY OF MANITOB	Α	
This International Search Report has bee according to Article 18. A copy is being tr	n prepared by this International Searching Autansmitted to the International Bureau.	thority and is transmitted to the applicant
This International Search Report consists  [X] It is also accompanied by	of a total of sheets. a copy of each prior art document cited in this	s report.
Basis of the report		
<ul> <li>a. With regard to the language, the language in which it was filed, un</li> </ul>	international search was carried out on the balless otherwise indicated under this item.	asis of the international application in the
the international search w Authority (Rule 23.1(b)).	vas carried out on the basis of a translation of	the international application furnished to this
b. With regard to any <b>nucleotide ar</b> was carried out on the basis of th	nd/or amino acid sequence disclosed in the i e sequence listing :	nternational application, the international search
contained in the internation	onal application in written form.	
filed together with the inte	ernational application in computer readable for	rm.
furnished subsequently to	this Authority in written form.	
	this Authority in computer readble form.	
the statement that the su international application a	bsequently furnished written sequence listing as filed has been furnished.	does not go beyond the disclosure in the
the statement that the inf furnished	ormation recorded in computer readable form	is identical to the written sequence listing has been
Certain claims were found	ınd unsearchable (See Box I).	
3. Unity of invention is lac	king (see Box II).	•
A NATION AND AND AND		
4. With regard to the title,  The text is approved as so	ibmitted by the applicant	
	shed by this Authority to read as follows:	
	,	
5. With regard to the abstract,		
the text has been establis	ubmitted by the applicant. shed, according to Rule 38.2(b), by this Autho e date of mailing of this international search re	rity as it appears in Box III. The applicant may, eport, submit comments to this Authority.
6. The figure of the <b>drawings</b> to be pub	lished with the abstract is Figure No.	
as suggested by the app	licant.	None of the figures.
because the applicant fai	led to suggest a figure.	
because this figure bette	r characterizes the invention.	

### INTER ATIONAL SEARCH REPORT



A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G01N33/543 C12Q1/00

According to International Patent Classification (IPC) or to both national classification and IPC

### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 G01N C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

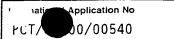
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 308 704 A (FUJI PHOTO FILM CO LTD)	1-3,5-9
Α	29 March 1989 (1989-03-29) claim 1; example 1	10
Α .	EP 0 296 036 A (ORGENICS LTD) 21 December 1988 (1988-12-21) abstract	1
Α	WO 97 43438 A (GAN ZHIBO ;UNIV MANITOBA (CA); HAO XIAO (CA); MARQUARDT DONALD R () 20 November 1997 (1997-11-20) cited in the application page 39 -page 42; example 3	10
Α	US 5 538 858 A (MALLIA A KRISHNA ET AL) 23 July 1996 (1996-07-23) claim 1	
	_/	•

X Further documents are listed in the continuation of box C.	χ Patent family members are listed in annex.
<ul> <li>Special categories of cited documents:</li> <li>"A" document defining the general state of the art which is not considered to be of particular relevance</li> </ul>	"T" later document published after the international filling date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the
"E" earlier document but published on or after the international filing date  "L" document which may throw doubts on priority claim(s) or	invention  "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
which is cited to establish the publication date of another citation or other special reason (as specified)  *O" document referring to an oral disclosure, use, exhibition or	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such document is combined with one or more other such document.
other means "P" document published prior to the international filing date but later than the priority date claimed	ments, such combination being obvious to a person skilled in the art.  *&* document member of the same patent family
Date of the actual completion of the international search	Date of mailing of the international search report
6 November 2000	22/11/2000
Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Hart-Davis, J

1

### INTET "ATIONAL SEARCH REPORT





		J/00540 				
C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT  Category Citation of document, with indication, where appropriate, of the relevant passages  Relevant to claim No.						
Category °	Citation of document, with indication, where appropriate, of the relevant passages		Tierevant to Gailli IVO,			
A	EP 0 518 557 A (LILLY CO ELI) 16 December 1992 (1992-12-16) example 1					
A	TWINNING S S: "FLUORESCEIN ISOTHIOCYANATE-LABELED CASEIN ASSAY FOR PROTEOLYTIC ENZYMES" ANALYTICAL BIOCHEMISTRY, vol. 143, 1984, pages 30-34, XP000961435 cited in the application the whole document					
A	JONES LAURIE J; UPSON ROSALYN H; HAUGLAND ROSARIA P; PANCHUK-VOLOSHINA NATALIYA; ZHOU MINGJIE; HAUGLAND RICHARD P: "Quenched BODIPY dye-labeled casein substrates for the assay of protease activity by direct fluorescence measurement"  ANALYTICAL BIOCHEMISTRY, vol. 251, 1997, pages 144-152, XP002152059 cited in the application					
	abstract 					
		•	·			
		•				
	·					
		•				
		•				
٠.						

1

### INTET 'ATIONAL SEARCH REPORT

Imc...natid attent family members

ration Application No PCT/00/00540

Patent document cited in search report		Publication date		atent family member(s)	Publication date	
EP	0308704	Α ,	29-03-1989	JP JP	1063863 A 1063864 A	09-03-1989 09-03-1989
EP	0296036	Α	21-12-1988	JP	1221665 A	05-09-1989
WO	9743438	Α	20-11-1997	AU CA EP	3122497 A 2254887 A 0912757 A	05-12-1997 20-11-1997 06-05-1999
US	5538858	Α	23-07-1996	NONE		
EP	0518557	A	16-12-1992	US AT CA DE DK JP	5235039 A 141649 T 2070719 A 69212911 D 518557 T 5194591 A	10-08-1993 15-09-1996 11-12-1992 26-09-1996 09-09-1996 03-08-1993

### PATENT COOPERATION TREATY

From the INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

Borden Ladner Gervais LLP 1000-60 Queen Street Ottawa, Ontario K1P 5Y7 CANADA

### PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of mailing (day/month/year)

16.08.2001

Applicant's or agent's file reference

International application No.

PCT/CA00/00540

84596-103

International filing date (day/month/year) Pri

10/05/2000

IMPORTANT NOTIFICATION

Priority date (day/month/year) 10/05/1999

Applicant

THE UNIVERSITY OF MANITOBA et al.

- 1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
- 2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
- 3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

### 4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/

Authorized officer

Danti, B

European Patent Office D-80298 Munich

Tel. +49 89 2399 - 0 Tx: 523656 epmu d

Fax: +49 89 2399 - 4465

Tel.+49 89 2399-8161





## PCT

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference		See Notification of Transmittal of International				
84596-103	FOR FURTHER ACTION Destination Deserting Deser					
International application No.	International filing date (day)	/month/year) Priority date (day/month/year)				
PCT/CA00/00540	10/05/2000	10/05/1999				
International Patent Classification (IPC) C12Q1/00	or national classification and IPC					
Annellona						
Applicant	NDA et el					
THE UNIVERSITY OF MANITO	DBA et al.					
This international preliminary eand is transmitted to the application.		pared by this International Preliminary Examining Authorit				
2. This REPORT consists of a to	tal of 4 sheets, including this co	over sheet.				
been amended and are th		s of the description, claims and/or drawings which have eets containing rectifications made before this Authority structions under the PCT).				
These annexes consist of a to	tal of sheets.					
3. This report contains indication	s relating to the following items:	·				
I ⊠ Basis of the report						
II 🗆 Priority						
III 🗆 Non-establishmen	t of opinion with regard to novel	ty, inventive step and industrial applicability				
IV 🔲 Lack of unity of inv	vention	•				
	V   Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations suporting such statement					
VI   Certain document	s cited					
VII   Certain defects in	the international application					
VIII   Certain observation	ns on the international application	on				
Date of submission of the demand	Da	ate of completion of this report				
		•				
07/12/2000	16	5.08.2001				
Name and mailing address of the interna	ational Au	uthorized officer				
preliminary examining authority:  European Patent Office		Signal Andrews				
D-80298 Munich	23656 epmu d	uendet, P				
Fax: +49 89 2399 - 4465	Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465  Telephone No. +49 89 2399 8690					

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/CA00/00540

ı.	Ba	sis of the r port	
1.	the and	receiving Office in r	tents of the international application (Replacement sheets which have been furnished to esponse to an invitation under Article 14 are referred to in this report as "originally filed" this report since they do not contain amendments (Rules 70.16 and 70.17)):
	1-1	8	as originally filed
	Cla	ims, No.:	
	1-1	7	as originally filed
2.			uage, all the elements marked above were available or furnished to this Authority in the nternational application was filed, unless otherwise indicated under this item.
	The	ese elements were a	vailable or furnished to this Authority in the following language: , which is:
		the language of pub	ranslation furnished for the purposes of the international search (under Rule 23.1(b)). Dication of the international application (under Rule 48.3(b)). Translation furnished for the purposes of international preliminary examination (under Rule
3.			eotide and/or amino acid sequence disclosed in the international application, the examination was carried out on the basis of the sequence listing:
		contained in the inte	ernational application in written form.
		filed together with the	ne international application in computer readable form.
		furnished subseque	ently to this Authority in written form.
		furnished subseque	ently to this Authority in computer readable form.
			the subsequently furnished written sequence listing does not go beyond the disclosure in plication as filed has been furnished.
		The statement that listing has been furn	the information recorded in computer readable form is identical to the written sequence nished.
١.	The	amendments have	resulted in the cancellation of:
		the description,	pages:
	$\Box$ .	the claims,	Nos.:
		the drawings,	sheets:
5.		This report has bee considered to go be	n established as if (some of) the amendments had not been made, since they have been eyond the disclosure as filed (Rule 70.2(c)):

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/CA00/00540

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

- 6. Additional observations, if necessary:
- V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- 1. Statement

Novelty (N)

Yes: No: Claims

Claims 1-17

Inventive step (IS)

Yes:

Claims

No: Claims 1-17

Industrial applicability (IA)

Yes:

Claims 1-17

No: Claims

2. Citations and explanations see separate sheet

### VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made: see separate sheet

1).

Point V.2.

- 1.1. The present method of claim 10 (and claims 11-17) for measuring the activity or concentration of a bioactive molecule would appear to lack novelty or at least an inventive step regarding D1: EP-A-0 308 704; cf claim 1 and Example 1. In D1 the reactant is also immobilised and a contains a known quantity of the detectable lable (cf. part c of Example 1), a sample is added/incubated and an enzymatic activity is measured after the incubation in a portion of the sample which has been transferred.
- 1.2. The present method of claim 1 (and claims 2-9), claim 10 (and claims 11-17) for measuring the activity or concentration of a bioactive molecule would appear to lack novelty or at least an inventive step regarding D3: WO-A-97/4343438; against present claim 1 (label/indicator with sample) see D3, e.g. claim 28 and also claim 44; against present claim 1 (label/indicator with bound reactant/bound first component) see D3, e.g. claim 15.

#### 2). Point VIII.

- 2.1. The present claims are rendered unclear by the term "quantity" in claims 1 and 10, i.e. by the phrases (claim 1) "removing a quantity of detectable label from the sample by binding detectable label to the reactant coated on the reaction vessel" and "measuring the quantity...counting vessel" and (claim 10) "releasing a quantity of detectable label from the reactant by incubating the reaction vessel under conditions such that the reactant and the detectable label contact the bioactive molecule having biological activity" and "measuring the quantity...counting vessel".
- 2.2. Present claims 1 and 10 would not allow a skilled person to understand the proportionality (which must exist) between an "amount of label" (cf. examples in the description) and the activity/concentration to be measured.

## (19) World Intellectual Property Organization International Bureau





### (43) International Publication Date 16 November 2000 (16.11.2000)

### **PCT**

## (10) International Publication Number WO 00/68415 A3

- (51) International Patent Classification<sup>7</sup>: G01N 33/543, C12Q 1/00
- (21) International Application Number: PCT/CA00/00540
- (22) International Filing Date: 10 May 2000 (10.05.2000)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data 2,270,639 V

10 May 1999 (10.05.1999) CA

- (71) Applicants (for all designated States except US): NORZYME, INC. [CA/CA]; 1839 Logan Avenue, Winnipeg, Manitoba R2R 0H4 (CA). THE UNIVERSITY OF MANITOBA [CA/CA]; Bannatyne Campus, 753 McDermot Avenue, Winnipeg, Manitoba R3E 0W3 (CA).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): MARQUARDT, Ronald, R. [CA/CA]; 878 Kilkenny Drive, Winnipeg, Manitoba R3T 4G3 (CA). GAN, Zhibo [CA/CA]; 1010-935 Dundas St. East, Mississauga, Ontario L4Y 4B7 (CA).
- (74) Agent: ADE & COMPANY; 1700-360 Main Street, Winnipeg, Manitoba R3C 3Z3 (CA).

- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

#### Published:

- With international search report.
- Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.
- (88) Date of publication of the international search report: 1 February 2001

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

A3

#### (54) Title: A METHOD FOR MEASURING BIOMOLECULES

(57) Abstract: Described herein is a method for detecting molecules with biological activity and determining the identity, amount and activity of same. The method involves the use of a vessel-based system which facilitates and simplifies the measurement of the amount and activity of enzymes, enzyme inhibitors, lectins, receptors and other biologically active substances comprising the steps of carrying out a biological reaction in a first vessel and then separating a labeled reactant from a labeled product by transferring a portion of the reaction mixture to a second vessel. Specifically, the surface of the first vessel is coated with a reactant, additional components are added, thereby forming a reaction mix, and the reaction is allowed to proceed for a given period of time. The soluble portion of the reaction mix is then transferred to a second vessel and the amount of reactant liberated into the reaction mix is counted.







### INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7:
C12Q 1/00 • (A2)

(A2) (A3) International Publication Date: 16 November 2000 (16.11.00)

(21) International Application Number:

PCT/CA00/00540

(22) International Filing Date:

10 May 2000 (10.05.00)

(30) Priority Data:

2,270,639

10 May 1999 (10.05.99)

CA

(71) Applicants (for all designated States except US): NORZYME, INC. [CA/CA]; 1839 Logan Avenue, Winnipeg, Manitoba R2R 0H4 (CA). THE UNIVERSITY OF MANITOBA [CA/CA]; Bannatyne Campus, 753 McDermot Avenue, Winnipeg, Manitoba R3E 0W3 (CA).

(72) Inventors; and

- (75) Inventors/Applicants (for US only): MARQUARDT, Ronald, R. [CA/CA]; 878 Kilkenny Drive, Winnipeg, Manitoba R3T 4G3 (CA). GAN, Zhibo [CA/CA]; 1010-935 Dundas St. East, Mississauga, Ontario L4Y 4B7 (CA).
- (74) Agent: ADE & COMPANY; 1700–360 Main Street, Winnipeg, Manitoba R3C 3Z3 (CA).

(81) Designated States: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

#### Published

Without international search report and to be republished upon receipt of that report.

(54) Title: A METHOD FOR MEASURING BIOMOLECULES

### (57) Abstract

Described herein is a method for detecting molecules with biological activity and determining the identity, amount and activity of same. The method involves the use of a vessel-based system which facilitates and simplifies the measurement of the amount and activity of enzymes, enzyme inhibitors, lectins, receptors and other biologically active substances comprising the steps of carrying out a biological reaction in a first vessel and then separating a labeled reactant from a labeled product by transferring a portion of the reaction mixture to a second vessel. Specifically, the surface of the first vessel is coated with a reactant, additional components are added, thereby forming a reaction mix, and the reaction is allowed to proceed for a given period of time. The soluble portion of the reaction mix is then transferred to a second vessel and the amount of reactant liberated into the reaction mix is counted.

### FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
ΑT	Austria	FR	France	LU	Luxembourg	SN	Senegal
ΑU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
ΑZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav	TM	Turkmenistan
BF	Burkina Faso	GR	Greece		Republic of Macedonia	TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
ВJ	Benin	ΙĒ	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	บร	United States of America
CA	Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CF	Central African Republic	JP	Јарап	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's	NZ	New Zealand		
CM	Cameroon		Republic of Korea	PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	KZ	Kazakstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LR	Liberia	SG	Singapore		